

## REMARKS

In response to the Office Action of November 14, 2007, Applicant requests reconsideration of the application for the reasons as set forth below. Claims 1-22 as amended with Applicant's submission of July 27, 2007 are currently pending in the present application. Applicant respectfully submits that the present application is in condition for allowance for the reasons set forth below.

### **Claim Rejections – 35 U.S.C. §112**

In the Office Action of August 31, 2007, the Examiner rejected Claims 1-18 under 35 U.S.C. §112, first paragraph, because the specification did not reasonably provide enablement for “alkaline earth carbonate, bicarbonate, sulfonate or phosphonate”. However, it is unclear why the Examiner maintained this rejection since the amended claims as filed with Applicant's response of July 27, 2007 **deleted** the very language the Examiner is arguing is not enabled. The amended Claim 1 following the amendment of July 27, 2007 is directed to a base which “consists essentially of magnesium bicarbonate, potassium carbonate, cesium carbonate, potassium phosphate, sodium hydroxide and potassium hydroxide . . .”, and the terms the Examiner objected to were deleted. In fact, the Examiner in the Official Action acknowledges that specific bases such as potassium hydroxide, potassium carbonate, etc. **would** be considered enabled by the specification, and in fact the recited bases are disclosed directly in the application, e.g., at page 12.

Accordingly, Applicants submit that this rejection could not have been made on the basis of the claims as amended in Applicant's submission of July 27, 2007, and thus the rejection is traversed and should thus be withdrawn.

### **Claim Rejections – 35 U.S.C. §103**

In the Official Action, the Examiner rejected claims 1, 2, 7, 8, and 19 under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,335,463 issued to Sommer (hereinafter "Sommer") in view of U.S. Patent No. 5,648,542 issued to Goodbrand et al. (hereinafter "Goodbrand"). Applicant respectfully traverses the Examiner's rejection for the reasons set forth below and respectfully submits that these claims are not made obvious by the cited references.

With regard to Sommer, while Sommer discloses a method for preparing the compound 1-[2-[4-[5-chloro-1-(4-fluorophenyl)-1-H-indol-3-yl]-1-piperidinyl]ethyl]-2-imidazolidinone, it does not mention or suggest at all the presence of a ligand chelating the copper catalyst. With regard to Goodbrand, this reference merely discloses the preparation of arylamines which comprises the reaction of 3-methyldiphenylamine and diiodobiphenyl in the presence of an organic solvent, an alkali metal, and a copper containing an organic ligand. The ligand is selected from the group consisting of monodentate tertiary amines and bidentate tertiary amines. See Goodbrand, Col. 3, lines 26-32. The Examiner's rejection was based in the assertion that it would have been obvious to one skilled in the art to implement the process of Sommer by using the copper containing the organic ligand of Goodbrand.

Contrary to the Examiner's assertion, though, neither Sommer or Goodbrand, alone or in combination, teach or suggest the methods claimed in the present application. In particular, the claimed methods of the present application feature an association of a base, such as potassium hydroxide or potassium phosphate, and water. The use of a base and water provides advantages over known methods in that they provide a cheaper and more volume efficient base, and easier reaction agitation which should help scale up. Further, the use of water, as described in the present application, allows for improved conversion rates.

In contrast to the present application, Goodbrand does not disclose the use of water in the reaction mixture. Instead, Goodbrand **teaches away** from the use of water in that the method disclosed in Goodbrand utilizes a totally different hydrocarbon solvent, such as toluene or xylene. See, e.g., Goodbrand, Col. 4, lines 28-29. Moreover, none of cited prior art references disclose or suggest using only water as the solvent to help improve the conversion rate and to reduce the reaction time. Therefore, it is clear that neither Sommer nor Goodbrand, either singly or in combination, disclose or suggest all of the features of Applicant's claims, and in fact **teach away** from the use of water in the reaction mixture. Accordingly, Applicant submits that the Examiner's rejection of claims 1, 2, 7, 8, and 19 as obvious over Sommer in view of Goodbrand is respectfully traversed and should be withdrawn.

Additionally, in the Official Action, the Examiner rejected claims 1-22 under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,395,939 issued to Marcoux, et al. (hereinafter "Marcoux") and further in view of Zanon, et al. (US2005/0101788, hereinafter "Zanon") and Sommer, further in view of Goodbrand. Applicant submits that

these rejections are respectfully traversed and that Claims 1-22 are not obvious over the cited references for the reasons set forth below.

As has been previously pointed out in Applicant's prior response filed July 27, 2007, Marcoux relates to reaction conditions that allow for the synthesis of diaryl ethers from arenes, bearing a leaving group, and arenols under relatively mild conditions. Contrary to the present invention, Marcoux does **not** mention the presence of water in the solvent utilized in these reactions, **nor** does Marcoux describe or suggest the use of a copper containing ligand.

Moreover, Zanon merely discloses the manufacture of 5-chloro-1-(4-fluorophenyl)-indole wherein the ligand is ethylenediamine and the solvent consists of 80 ml of toluene and 20 ml of water (See Zanon, examples 19 and 20) or 2 volumes of dimethylformamide and 0.5 volume of water (See Zanon, example 27). Zanon, in examples 19, 20, and 27, further discloses a reaction time of 36, 40, and 19 hours, respectively, and a conversion rate of only 89%, 67%, and 58%, respectively. Contrary to these low conversion rates taught in Zanon, Example 1 of the present application shows a superior conversion rate of the compounds of over 90% after only 4 hours of reaction time. Therefore, the claimed method enables a better yield in less time than the cited prior art.

Even further, Zanon also **teaches away** from the present invention in that its disclosure would teach one **not** to utilize water as the solvent in the reaction. In particular, Examples 25 and 28 of Zanon actually indicate **better** results in the **absence** of water. Consequently, one skilled in the art viewing the Zanon reference would have **no motivation whatsoever** to include more water as the solvent for the reaction or to

use water exclusively as the solvent for the reaction, and indeed is **taught away** from the use of water since the results obtained are better in the **absence** of water.

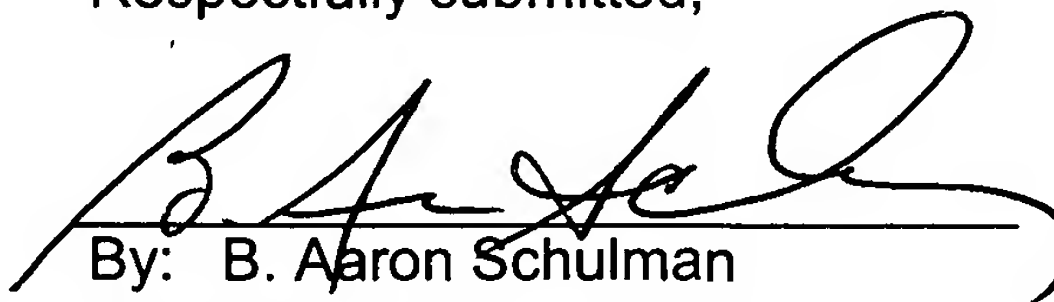
Finally, the teachings of Sommer and Goodbrand, as set forth above, do not combine with the other references to make the present invention obvious, and indeed also **teach away** from the use of water in the reaction mixture.

In short, none of the references cited by the Examiner, namely Marcoux, Zanon, Sommer, or Goodbrand, either alone or in combination, teach or suggest using only water as the solvent in the present process to improve the conversion rate and to reduce the reaction time. Accordingly, the Examiner's rejection on the basis of these references is respectfully traversed and should be withdrawn.

In light of the arguments as set forth above, Applicant submits that all of the outstanding rejections have been overcome, and that the present application and its pending claims are in condition for immediate allowance. Applicant thus respectfully requests immediate allowance of all claims now pending in the present application.

Respectfully submitted,

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